



THE 1993 NATIONAL CENSUS OF PINK-FOOTED AND GREYLAG GEESE IN BRITAIN

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SUMMARY

The 34th consecutive census of Pink-footed and Greylag Geese in Britain took place in autumn and early winter 1993. Two discrete counts were undertaken, recording maxima of 224,354 Pink-footed Geese in October and 99,253 Greylag Geese in November.

The Pink-footed Goose total represents a 13% increase compared with 1992, whilst the Greylag Goose population estimate has remained similar to the previous year. Both species bred reasonably well in 1993 with 18.1% and 18.9% young, and brood sizes of 2.18 and 2.35 young/pair for Pink-footed and Greylag Geese respectively. Compared to 1992, breeding success in 1993 was better for both species and, interestingly, for other high latitude breeding geese too.

The counts are believed to be a close estimate of the true population due to good coverage and co-ordination and reasonable counting conditions. However, a very few observers reported that some birds may have been missed giving a revised estimate of 225,000 Pink-footed and 100,000 Greylag Geese. Regional distribution of the birds and the importance of key sites is discussed. A summary of the joint WWT/Highland Ringing Group Greylag Goose ringing programme is provided.

INTRODUCTION AND METHODS

The 34th consecutive national census of Pink-footed Geese *Anser brachyrhynchus* and Greylag Geese *Anser anser* was conducted in autumn and early winter 1993. The methods followed previous years with, as in 1990 to 1992, two discrete counts being made, one in October and one in November. The majority of observations were conducted by volunteers, usually made as dawn or dusk counts at known roost sites, although in a very few areas, where the locations of roost sites were poorly known, daytime counts of feeding birds were made. Assessments of the number of young present in autumn flocks and the average brood size per family were made by experienced counters at a number of sites in northern Britain during the period 1 October through to 15 November.

WEATHER CONDITIONS AND COVERAGE

Counts made on 16/17 October were generally good with light winds, bright spells, thin high cloud and an early morning frost reported from many areas, particularly in the north. The weather in November was unusually good for goose counting too, with a cold, bright day and an early frost reported from many localities. Isolated snow showers were reported in Tayside/Central Regions and a few showers were recorded on the east coast. There were no reports of fog or mist hampering counting although the snow showers in November may have caused some undercounting (e.g. c.2,500 Pinkfeet may have been missed at *Dupplin Loch*, Perth & Kinross since birds were moving around at first light during a snow shower)

There was a full moon on 30 October and 29 November - thus having little effect on counts for both months - new moons co-inciding with the count weekends. There were only a few reports of night feeding where birds may have roosted on fields rather than flying to lochs, although one or two counters suspected some birds may have left the roost prior to the counters arriving.

A total of 147 sites was covered by the census representing a slight increase on the coverage in 1992 and, once again, it is reassuring to note that all of the important sites were covered (see '*principal concentrations*' discussion below).

There were several sites where counts were not accurate, and caused by a number of reasons, notably locally poor weather. However, these probably did not affect the total population estimates for either species greatly. Loch Gelly, Fife, the Forth Valley fields, Central, Thornhill area, Central, Crombie Country Park, Angus, and Long Loch, Angus were all counted in November but were not covered in October. Thus, although Greylags would have been counted in that month none of these sites regularly hold more than a few hundred Pinkfeet in October, Tayinloan and Machri'hanish (both in Argyll), which normally hold no more than a few hundred geese in November, were not covered in that month but were counted in October.

Central Scotland Goose Group reported some difficulties in achieving coverage of smaller roosts particularly for Greylags - a symptom of the fragmentation of former larger roosts. Also, the peak number of Pinkfeet using that area occurred in the first week of October (e.g. Dupplin Loch supported 36,500 on 9 October but only 11,600 a week later). Hopefully, these passage birds should have been picked up further south.

On the whole the weather was surprisingly good for goose counting on both weekends (an unusual occurrence) and together with good coverage this surely assisted in presenting as accurate a population estimates as was possible.

RESULTS AND DISCUSSION

TOTAL NUMBERS

Pink-footed Geese

The count of 224,354 Pink-footed Geese in Britain in October 1993 (Table 1) represented a 13% increase compared with October 1992 and the estimated population (225,000) was thus similar to that recorded in 1991 (232,000). The count for November 1993 (194,957) was 16% higher than the corresponding total counted in November 1992 (167,512). For October, there were few suggestions that birds had been missed, and in view of the large numbers of sites covered and good weather, it seems likely that the number is close to the true population size.

The 1993 counts reveal a reduction between October and November - an apparent loss of c.30,000 birds (approximately 15% - the same value obtained in 1992). This year, no major roosts were missed in November, nonetheless, this complements the suggestion by Newton *et al.* (1990) that a more accurate estimate of the Pink-footed Geese population can be obtained in October before birds start to disperse more widely within Britain.

Greylag Geese

The count of 99,253 Greylag Geese in Britain in November 1993 is very similar to the population estimate for 1992. The suggestion, based on the 1991 counts, that the number of Greylags wintering in Britain was declining, perhaps suffering from intensive hunting pressure at certain sites, may still hold, and clearly this needs further investigation. However counts in the last ten years (Figure 1) show a population which has remained stable at around 100,000. As in 1992, the Greylags had arrived early from Iceland in 1993 - the October count comprising 84% of the November population estimate. In 1991 less than 50% of the total have arrived by the first count date, thus the closeness in numbers of the two counts in 1993 allows a comparison of the distribution of nocks (Figure 2).

Table 1. The numbers of Pink-footed and Greylag Geese recorded in Great Britain in October and November 1993. The number of sites counted is also given.

DISTRICT/REGION	OCTOBER			NOVEMBER		
	Sites	Pinkfeet	Greylag	Sites	Pinkfeet	Greylag
Shetland	nc			nc		
Orkney	7	10	1,709	7	0	4,112
Western Isles	2	1	143	2	0	124
Caithness	+	0	4,520	+	0	5,433
Sutherland	3	0	1,431	3	1	2,225
Ross & Cromarty	6	50	18,317	6	1	10,297
Inverness/Nairn	3	4	6,408	2	0	2,105
Badenoch & Strathspey	1	3	835	1	0	1,550
Moray	3	0	5,977	3	56	13,260
Banff & Buchan	1	37,250	100	1	38,970	1,400
Gordon/Aberdeen	3	1,904	14,020	3	12,210	13,821
Kincardine & Deeside	1	0	7,091	1	0	11,502
Angus/Dundee	4	49,290	4,109	6	33,295	4,728
Perth & Kinross	17	37,441	7,230	18	34,902	7,377
Central	4	4,570	18	5	3,011	1,032
Fife	15	6,121	1,198	15	4,838	3,517
Argyll & Bute	6	3	1,768	4	0	1,690
Glasgow area *	3	0	314	3	0	517
Clydesdale	1	4,200	0	1	5,100	0
Stewartry/Wigtown	7	1	2,859	7	0	3,280
Annan & Eskdale/Nithsdale **	7	4,222	209	7	547	106
East/Midlothian	8	26,521	360	7	14,975	834
Edinburgh/West Lothian	4	3,060	716	4	550	1,716
Borders (west) ***	7	14,840	1,060	8	1,664	3,706
Tweeddale	2	18,000	20	2	12,500	0
Northumberland	8	352	1,922	6	381	3,088
Cumbria **	4	0	887	4	0	1,435
Lancashire and Merseyside	+	11,540	0	+	17,807	0
Humberside	nc			nc		
Lincolnshire	5	1	0	4	6	0
Norfolk	4	4,970	273	4	14,143	398
TOTAL	138	224,354	83,494	136	194,957	99,253

* includes Bearsden & Milngavie, Clydebank, Cumbernauld & Kilsyth, Cumnock & Doon Valley, Dumbarton, East Kilbride, Eastwood, Glasgow City, Hamilton, Inverclyde, Kilmarnock & Loudoun, Kyle & Carrick, Monklands, Motherwell, Renfrew and Strathkelvin.

** for convenience, counts from the Solway Firth are included in the Annandale & Eskdale/Nithsdale total even though some birds roost and feed on the Cumbrian side of the estuary.

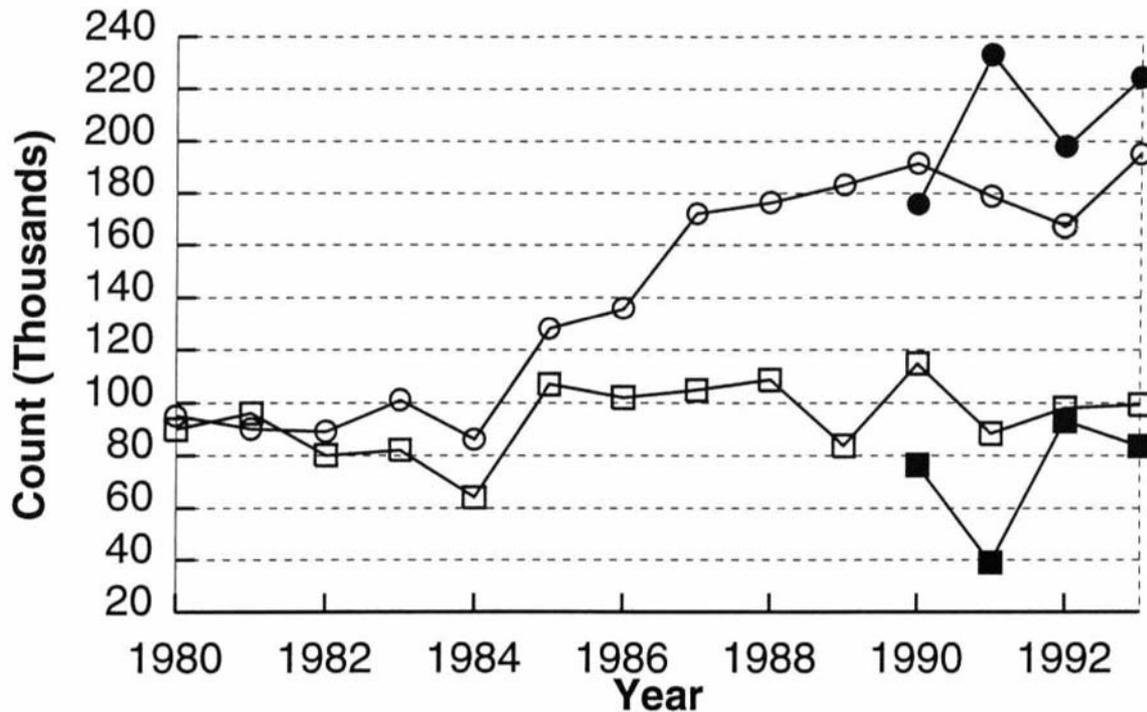
*** includes Ettrick & Lauderdale, Roxburgh and Berwickshire.

+ Several sites consolidated

nc no count received

There were several sites where counts were not accurate, for a number of reasons, or may not have referred to Icelandic birds (See Discussion in Mitchell & Cranswick 1993). However, these inaccuracies do not affect the November population estimate greatly - for example: *Caistron*, Northumberland (82 feral), several sites in Perth & Kinross (e.g. *Loch Leven*), *Lochinch*, Wigtownshire and on the *Isle of Lewis*, where small numbers of Greylags are known to breed, *Hellon* and *Low Holme*, Cumbria (120 and 252 feral), *Shapinsay*, Orkney (300 feral), *Holkham Park*, Norfolk (273 feral). In all cases the numbers of feral or re-introduced Greylags is small but these flocks can be augmented by winter visitors, thus confusing the picture. A revised population estimate is therefore nearer 100,000.

Figure 1. The numbers of Pink-footed Geese (circles) and Greylag Geese (squares) recorded by WWT counts in November (open symbols) and, more recently, October (closed symbols), 1980-1993.



REGIONAL DISTRIBUTION WITHIN BRITAIN

The distribution of Pink-footed and Greylag Geese by region/district in October and November 1993 is shown in Table 1, whilst Table 2 shows the gross regional distribution of geese. Table 3 shows the principal resorts of both species and Figure 2 shows distribution maps of counts.

Pink-footed Geese

In October, the majority of birds (43%) were recorded in East-central Scotland (Tayside, Central and Fife). Over one quarter of the total was in the South-east Scotland/North-east England (Lothians, Borders and Northumberland), and 17% was found in North-cast Scotland (eastern Grampian). This pattern was remarkably similar to 1992 and 1991 and by November there was, as expected, a movement south with increases in West England (Lancashire) and East England (Norfolk). Note, too, the rapid movement of birds through South-east Scotland in 1993, a decrease from 62,000 birds in October to half that number by November.

Greylag Geese

Greylag Geese arrived reasonably early in autumn 1993, as they did in 1992 - a marked difference to 1991 (see Cranswick & Kirby 1992). In 1993, the October and November counts were quite similar showing only an 15% increase between the two months. Notable concentrations in October 1993 were found in North Scotland (principally Highland Region), which accounted for 33% of the population, although groups were already reported from more southerly areas with 27% of the population in North-east Scotland (Grampian) and 12% in East-Central Scotland. By November the groups were a little more dispersed, North Scotland accounting for only one quarter of the population whilst North-east Scotland now supported 40% - a marked increase in numbers occurring in Kincardine and Deeside. In other areas the counts for October and November were similar.

Table 2. Gross regional distribution of Pinkfooted and Greylag Geese in Britain in October and November 1993, expressed as a percentage of the maximum count for each species.

AREA *	Pink-footed Goose		Greylag Goose	
	Oct	Nov	Oct	Nov
North Scotland	0.0	0.0	33.6	26.0
North-east Scotland	17.5	22.8	27.4	40.3
East-central Scotland	43.6	33.9	12.6	16.8
South-east Scotland/North-east England	28.0	13.4	4.1	9.4
South-west Scotland/North-west England	3.8	2.5	6.1	7.1
West England	5.1	7.9	0.0	0.0
East England	2.2	6.3	0.3	0.4
Total	100.0	86.9	84.1	100.0

* areas are defined as follows:

North Scotland: Shetland, Orkney. Western Isles.
 Highland North-east Scotland: Grampian
 East-central Scotland: Tayside. Central. Fife
 South-east Scotland/North-east England: Lothian, Borders, Northumberland
 South-west Scotland/North-west England: Strathclyde. Dumfries & Galloway.
 Cumbria West England: Lancashire. Merseyside
 East England: Humberside, Lincolnshire, Norfolk

Note the 40% decline in numbers of Greylags around the Moray Firth between the two months (a decline of 9,880 birds) - a figure similar to the decline recorded in 1992 (8,190). Although the numbers of geese involved over the two years were very similar, there were differences in where the birds were located - a situation no doubt found in other areas too. For example, 8,000 Greylags roosted on *Loch Eye*, Easter Ross, early Saturday night on the weekend prior to the November count but, by Sunday morning, only 300 was counted in the whole of the Easter Ross area. It seems that bonfires and fireworks near the loch during the late evening were sufficiently disturbing to cause the birds to leave the loch for other sites (e.g. an unusually high number was counted at *Udale Bay*).

Figure 2a. *The location of Pink-footed Geese on census dates in autumn 1993*

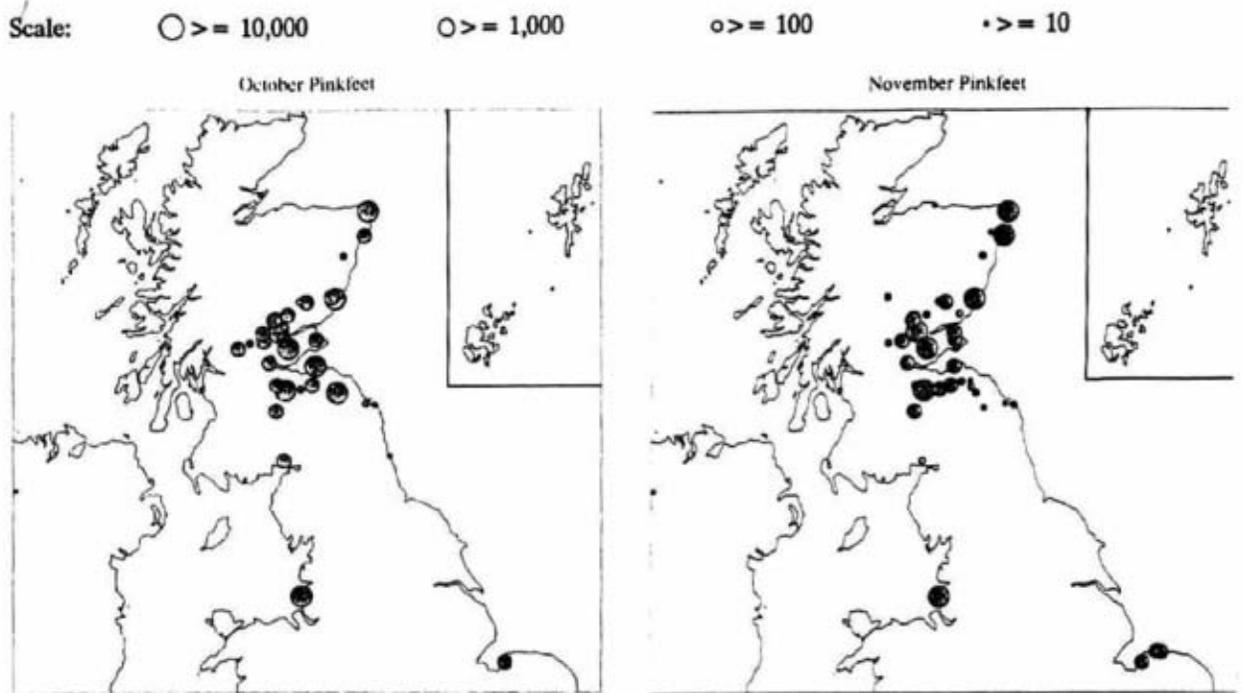


Figure 2b. *The location of Greylag Geese on census dates in autumn 1993*

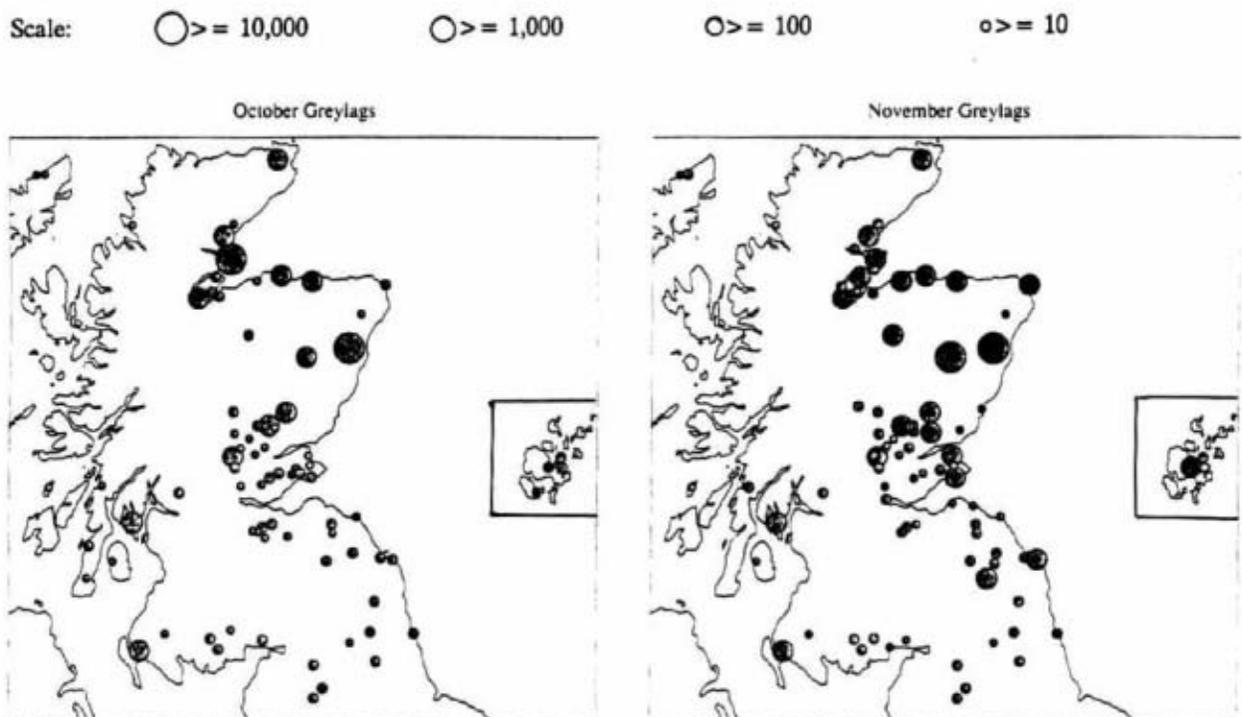


Table 3. Principal Pink-footed and Greylag Goose resorts counted in Autumn 1993. Columns show all counts from the top ten sites for each species (A,D), the site count as a proportion of census totals (B,E), and the site count as proportion of average winter maxima from the previous five autumns (C,F).

PINKFEET							
	OCTOBER			NOVEMBER			
Census Total	224,354			194,957			
	A	B	C	D	E	F	G
Montrose Basin	41,210	18.4	189	22,840	11.7	105	21,800
Loch of Strathbeg	37,250	16.6	121	38,970	20.0	127	30,690
Aberlady Bay	19,100	8.5	201	8,400	4.3	87	9,479
West Water Reservoir	18,000	8.0	56	12,500	6.4	39	31,717
Hule Moss	14,100	6.2	86	677	0.4	4	16,394
Dupplin Loch	11,600	5.2	30	12,900	6.6	33	39,200
South West Lancs/Merseyside	11,540	5.1	34	17,807	9.1	52	34,188
Loch Leven	10,090	4.5	55	11,860	6.1	65	18,230
Fala Flow	6,450	2.9	70	3,960	2.0	43	9,208
Cameron Reservoir	6,000	2.7	62	2,880	1.5	30	9,613

GREYLAGS							
	OCTOBER			NOVEMBER			
Census Total	83,494			99,253			
	A	B	C	D	E	F	G
Loch of Skene	14,000	16.7	182	13,781	13.4	180	7,675
Dinnet Lochs	7,091	8.5	39	11,502	11.6	64	17,970
Lower Bogrotten	2,600	3.1	138	5,620	5.6	298	1,883
Caithness Lochs	4,520	5.4	114	5,433	5.5	137	3,965
Loch Spynie	3,320	4.0	47	5,000	5.0	77	7,066
Udale Bay	462	0.6	-	5,000	5.0	-	-
Orkney Lochs	1,709	2.0	47	4,112	4.1	112	3,666
Loch Eye	16,842	20.1	119	3,965	4.0	28	14,109
Loch of Lintrathen	4,100	4.9	120	3,620	3.6	107	3,398
Findhorn Bay	57	0.1	1	2,640	2.6	87	3,023

- A - October site count
- B - Site count as a percentage of October census
- C - October site count as a percentage of 5 year mean (G)
- D - November site count
- E - Site count as a percentage of November census
- F - November site count as a percentage of 5 year mean (G)
- G - 5 Year peak mean (from Waters & Cranswick 1993)

PRINCIPAL CONCENTRATIONS

Pink-footed Geese

Over 58% of the October total was found at only five sites: *Montrose Basin*, Angus (41,210), *Loch of Strathbeg*, Banff & Buchan (37,250), *Aberlady Bay*, East Lothian (19,100), *West Water Reservoir*, Tweeddale (18,000) and *Hule Moss*, Berwickshire (14,100) (see Table 3). *Montrose Basin* alone accounted for 18% of the October total. Overall, eight sites held more than 10,000 Pinkfeet, a further 19 sites held over 1,000, (thus only 27 sites accounted for 99% of the October count). A further 12 sites held over 10 Pinkfeet.

A

similar pattern was reported a month later with 54% of the November count found at only five sites: *Loch of Strathbeg* (38,970), *Montrose Basin* (22,840), *South-west Lancashire* (17,807), *Dupplin Loch* (12,900) and *West Water Reservoir* (12,500). In all, Pink-footed Geese were recorded at 68 sites either in October or November (Figure 2).

Among other autumn counts received, notable maxima away from the census dates include: 40,000+ at *West Water Reservoir* (7 October, and 26,000 there on 8 October), 36,500 at *Dupplin Loch* (9 October), 27,300 at *Cameron Reservoir*, Fife (30 October, and 22,040 there on 7 October) - a record count for that site, and 26,100 at *Aberlady Bay* (14 October).

Greylag Geese

In November, 47% of the total was found at only 6 sites: *Loch of Skene*, Grampian (13,781), *Dinnet Lochs*, Grampian (11,502), *Lower Bogrotten*, Grampian (5,620), *Caithness Lochs* (5,433), *Loch Spynie*, Grampian (5,000), and *Udale Bay*, Highland (5,000). Overall, 23 sites held more than 1,000 birds and accounted for 79% of the population. A further 71 sites held between one and 1,000 birds demonstrating the dispersed nature of this species when compared to Pinkfeet.

In all, Greylag Geese were recorded at 110 sites in either October or November (Figure 2) - a figure almost identical to that recorded in 1992. In addition to the census counts the following were recorded: counts of, 27,173, 25,396, 19,190, 14,881 and 13,846 at *Dinnet Lochs* between 5 November and 22 November (note, however, that the census count recorded only 11,502 on 17 November)

BREEDING SUCCESS

Pink-footed Geese

A total of just over 19,500 Pink-footed Geese was aged at various localities in Scotland, Lancashire and in north Norfolk. Breeding success was reasonably good with 18.1% young observed in sample flocks and mean brood size (2.18) was about average (Table 4). These results are, nonetheless, comparable with most other high-latitude and Arctic breeding geese that wintered in Britain in 1993/94. Dark-bellied Brent Geese (18% young), Greenland Barnacle Geese (11.5%), Svalbard Barnacle Geese (11.7%), and Greenland White-fronted Geese (c.15%) appear to have had a much better breeding year than in 1992.

Greylag Geese

Fewer data were received for Greylag Geese than Pinkfeet and these were, once again, provided by one observer (M.A.Ogilvie) for eleven nocks in Scotland during November. Greylag breeding success was also reasonable in 1993, with 18.9% young observed in sample flocks and the mean brood size (2.35) was just above average (Table 4). Once again Greylags produced a slightly higher proportion of young than Pinkfeet.

DISCUSSION

The 1993 counts, made over single weekends and in good goose counting conditions, provided accurate population estimates for both species. Figure 1 shows the population estimates for the period 1980-93. From 1990 counts have been made in both October and November. Population estimates for Pink-footed Geese have, rightly, been based on the October counts; however, the traditional November population estimates are also shown for comparison. The importance of, and differences between, the October and November counts will become apparent over the coming years.

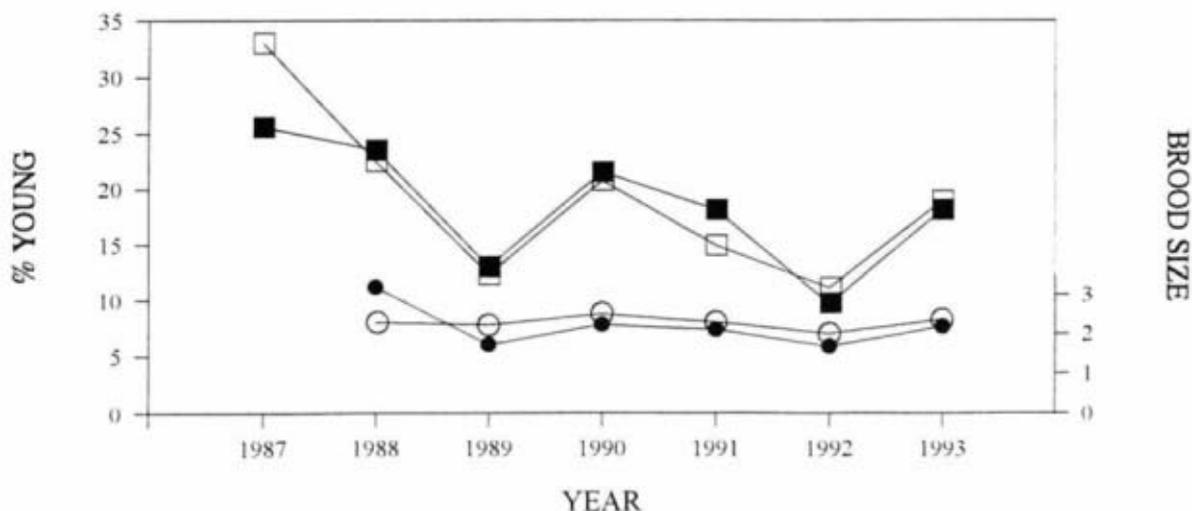
The 1993 population estimate for Pink-footed Geese largely reflects a good breeding season and brings the estimate close to that for 1991. The situation for Greylag Geese remains stable. The totals for the October and November counts are reasonably close and show that the geese arrived from Iceland early,

as they did in 1992. Despite alarm bells sounding in 1989 and 1991, when the population appeared to fall, the current estimate of 100,000 is, for the time being, re-assuring. What is still far from understood, however, is the continued success of the Pinkfoot population in the face of an apparent levelling off in Greylag numbers.

Table 4. The proportion of young and average brood size in Pink-footed and Greylag Goose flocks in autumn and early winter of 1992. (Regions are defined in Table 2)

	Region	No. of flocks	Total aged	% Young	no. of broods	Brood size
Pink-footed Goose	North-east Scotland	5	1,900	11.9	6	1.66
	East-central Scotland	13	9,734	19.0	242	2.32
	East England	6	4,701	13.8	32	1.72
	West England	9	3,175	25.6	111	2.05
	Total	33	19,510	18.1	391	2.18
Greylag Goose	North Scotland	4	1,550	20.2	28	2.39
	North-east Scotland	3	1,300	18.1	56	2.41
	East-central Scotland	5	1,500	18.5	72	2.29
	Total	11	4,350	18.9	156	2.35

Figure 3. The percentage of young (squares) and brood sizes (circles) for Pink-footed Geese (closed symbols) and Greylag Geese (open), recorded by WWT censuses, 1987-1993



Additional data were received for both species from neck scans made after this time. These data have not been included in the analysis above in order to maintain continuity with previous years, however the data collected (e.g. by D. Patterson and I. Stenhouse) will form part of a larger analysis investigating brood size changes during the winter months and into the spring.

Regional variation in the proportion of young recorded persists - notably demonstrated at *Martin Mere*, Lancashire, which supports a larger than average proportion of families with young (25% young in 1993) with larger families (mean brood size 2.05) compared with, for example, north Norfolk (13.8% young, mean brood size 1.72).

Although evidence of adverse hunting practices is still largely anecdotal and difficult to quantify, goose counters can contribute valuable data. The November total for Greylags in the Strathallan and Strathearn areas were very low, and may partly be caused by shooting disturbance (M. Bell *In litt.*). Shooting parties apparently have access to most farms in *Stralhearn* and some in *Strathallan* which a few years ago were shooting free. Only 15 years ago, Perth & Kinross District was the main Greylag area in Britain. Maintaining the traditional range of a species is a conservation objective for species listed in EC Bird Directives. At the present rate of decline, migrant Greylags could be lost from South-west Perthshire.

Winter 1993/94 saw the development of a study investigating the distribution of grey geese during the winter months and into the spring. Ian Stenhouse was employed by WWT from October and part of his aim was to initiate a mid-winter and spring census. Many of the counters involved in the counting of roost sites in October and November helped with these additional counts. We hope to continue this monitoring in the coming years with four roost counts from each site, each winter. The autumn counts will continue to feed data into total population and productivity estimates and the winter and spring counts will contribute to our understanding of the distribution and importance of key sites at times other than the autumn.

Ian's report on the first season will be finished during the summer - the results being eagerly awaited. However, it is already known that mid-winter 1993/94 produced an unprecedented influx of Pinkfeet into England, responding to adverse weather further north. Over 60,000 Pinkfeet were counted in north Norfolk (a record) in January alone representing over a quarter of the population.

GREY GEESE IN IRELAND

Pinkfeet are considered rare winter visitors to Ireland and sightings are usually of small flocks - a quick check of the distribution map in the Atlas of Wintering Birds (Lack 1986) reveals the absence of this species wintering there. During the 1992-93 winter only six Pinkfeet were recorded in Northern Ireland (Waters & Cranswick 1993). The only regular flocks are a small number seen annually at *Wexford Slobs*, Wexford and small numbers recorded around *Loch Foyle*, Derry and *Loch Swilly*, Donegal and these latter probably involve passage bird on the way to Scotland.

Oscar Merne in his review of the status of Greylag geese wintering in Ireland in March 1986 (Merne 1986) estimated the population to be around 3,800 with regular flocks encountered at *Loch Foyle*, Derry (c. 200), *Stabbanan*, Louth (c.450), *Lambay Island*, Dublin (c.1000), *Broad Lough*, Wicklow (c.400), *Poulaphouca Reservoir*, Wick low (c.260), *River Suir*, Waterford (c.450) and *River Shannon*, Limerick (c. 100). These were considered 'wild' flocks (of Icelandic origin) and their general distribution in 1986 had not changed significantly to accounts from the 1950s (Ruttledge and Hall-Watt 1958). Attempts to describe the total population of Icelandic Greylag Geese depends, therefore, on routine monitoring of the Irish flocks in addition to those reported from Britain. Any interchange between flocks in Scotland and Ireland, particularly at times of cold weather in Scotland, might be demonstrated through the use of ringed individuals.

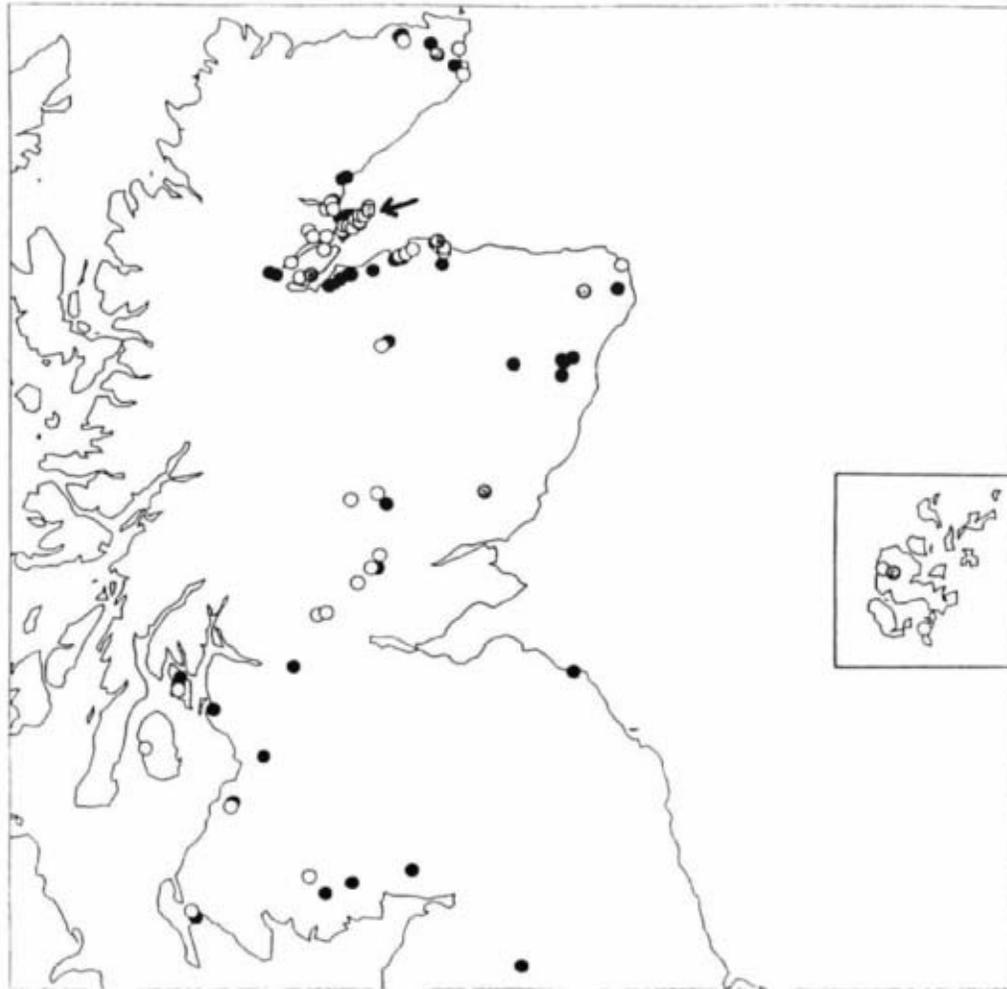
WWT RINGING STUDIES OF GREYLAG GEESE

As outlined in the last report (Mitchell & Cranswick 1993) the ringing of Icelandic Greylag Geese has received little attention in recent years. Up to 1990 only about 3,000 had been ringed in Scotland, 80% of which were caught in the 1950s and 1960s, and these have generated 550 recoveries. In an attempt to address this, a further 200 wintering Greylags have been caught at *Loch Eye*, Easter Ross, during 1993/94 by the Highland Ringing Group. Again, each has been marked with a BTO ring and an engraved plastic ring - most were also marked with a temporary yellow dye on the under tail coverts. Early sighting data suggests that *Loch Eye*, already established as a key staging and wintering roost site through wildfowl

counts, provides refuge in November for many birds that winter elsewhere in Scotland. Colour ringed birds have been seen in Grampian, Central and south to Dumfries & Galloway (Figure 4). Records of colour ringed birds have also been reported from Iceland in summer 1993. None, so far, have been reported from Ireland (see above).

The colour ringing of Pinkfeet and Greylags will continue this winter (1994/95) and grey goose counters are encouraged to check for the presence of rings or dyed birds. Even sightings with incomplete details (i.e. the letters on the ring were not read) are extremely useful. Please send any sightings to 'Colour marked wildfowl', WWT, Slimbridge, Glos, GL2 7BT.

Figure 4. Distribution of sightings and recoveries of colour ringed (and dyed) Greylag Geese ringed at Loch Eye, Easter Ross (indicated by arrow).



Key:

- - Sightings within-winter
- - Sightings in subsequent winters
- ⊗ - Greylags found dead (usually shot)

AUTUMN COUNTS 1994

The dates for the 1994 annual national census of Pink-footed and Greylag Geese have been provisionally set for 8-9 October and 12-13 November,

ACKNOWLEDGEMENTS

The censuses of Pink-footed and Greylag Geese form part of the long-term goose monitoring programme in the U.K. which receives financial support from the Joint Nature Conservation Committee and the Department of the Environment for Northern Ireland. Their support is gratefully acknowledged.

Thanks also to Peter Cranswick, Richard Pettifor and David Stroud for comments on a draft of this report. Marie Callaghan assisted with data processing.

A large number of dedicated goose enthusiasts have again made this census possible. An enormous thanks to all these people and to the area co-ordinators for their efforts and advice and comments on the grey goose situation in their areas. These include (with apologies for any omissions or misspellings):

M. Ackerman, G. Adam, M. Andrew, A. Barclay, M. Bayne, M. Bell, W. Bews, S. Blythe, C. Booth, I. Brockway, A. Brown, D. Bryant, J. Burrow, E. Cameron, C. Campbell, M. Carrier, J. Clarke, M. Cook, J. Corbett, J. Cowan, D. Creasey, A. Cremin, F. Crystal, P. Cunningham, P. Davey, I. Dennis, R. Dickson, A. Duncan-Jones, R. Evans, K. Fairclough, D. Forshaw *et al.*, R. Goater, A. Gordon, P. Gordon, R. Graham, H. Gray, J. Gunn, S. Hacker, M. Harvey, L. Hatton, R. Hawley, V. IHlewison, P. Hirst, K. Hodgson, S. Hollinrake, N. Holton, M. Howat, G. Huxley, M. Kendall, A. Lauder, D. Law, J. Law, S. Laybourne *et al.*, M. Legg, B. Little, I. MacDonald, T. Malin, S. Manson, J. Master, W. Mattingley, E. Maughan, F. Mawby *et al.*, J. McCutcheon, R. McCutcheon, N. McMullen, G. McShane, E. Meek, W. Melrose, P. Norman, D. Patterson, I. Patterson, I. Pirie, B. Pounder, G. Powell, T. Prescott, G. Prest, J. Quinn, M. Ramage, A. Robertson, M. Robinson, B. Robson, J. Ross, N. Rossiter, B. Sage, S. Sankgy, A. Scobbie, R. Sidaway, M. Shimeld, S. Shimeld, C. Smith, J. Smith, J. Smith, B. Swann, F. Symonds, M. Taylor, N. Taylor, R. Thaxton, V. Underwood, D. Wardrobe, R. Watson, P. Walts, T. Wilson, and J. Wyberton, South Solway Wildfowlers' Assoc., North Solway Wildfowlers' Assoc., Dunfermline Ranger Service and Clackmannan Ranger Service.

Age assessments were provided by: M. Andrew, Colin Campbell, Rick Goater, Malcolm Ogilvie, David Patterson, Ian Patterson, Dominic Rigby, Ian Stenhouse and Chris Tomlinson.

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15 July 1994